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California Regional Water Quality Control Board
North Coast Region

ORDER NO. 89-70
I.D. NO. 1A801680SIS

WASTE DISCHARGE REQUIREMENTS

FOR

CITY OF WEED SOLID WASTE DISPOSAL SITE
CLASS III WASTE MANAGEMENT UNIT

Siskiyou County

The California Regional Water Quality Control Board, North Coast Region (hereinafter the Regional Board), finds that:

1. The City of Weed (hereinafter the discharger) operates the Weed solid waste disposal site located 1.5 miles east of Weed, California in the east half of section 6, T41N, R4W, MDB&M as shown in Attachments "A" and "B", incorporated herein and made a part of this Order. The site is on lands owned by Southern Pacific Land Company, Southern Pacific Building, One Market Plaza, San Francisco, CA 96134. Site property is currently being acquired and is presently in escrow.
2. In response to a Report of Waste Discharge filed on December 24, 1979, the Regional Board adopted Order No. 80-168, Waste Discharge Requirements for the City of Weed Solid Waste Disposal Site on September 25, 1980. Order No. 80-168 classified the site as Class II-2 under the Subchapter 15 regulations which were in effect at that time.
3. The existing facility is a 50-acre site with a total disposal capacity of 161,333 cubic yards. An additional 67 acres of land adjoining the site is currently being acquired for future use. Since 1968 the landfill has been receiving waste material at an average annual rate of 7,665 cubic yards. At this rate, the total in-place fill volume reached the 161,333 cubic yard limitation specified in Order No. 80-168 in early 1989. Waste discharge since this date has exceeded the permitted capacity and constitutes a material change in the volume of discharge. Section 13260 (c) of the California Water Code requires that a report (Report of Waste Discharge) of material change be filed with the Regional Board. The discharger has not filed a report since 1980.
4. Pursuant to the Calderon Bill (AB 3525, 1984) a Solid Waste Assessment Test (SWAT) report was prepared by the discharger to evaluate site water quality and provide an indication whether hazardous wastes are leaking from the waste management unit. The SWAT report was submitted to the Regional Board on July 5, 1988 and concludes that hazardous wastes are not leaking from the site. The report adequately describes the geologic setting, including the occurrence of groundwater and fluvioglacial deposits of the Pleistocene epoch.

5. The discharger needs additional time to prepare geotechnical and operational reports in compliance with California Code of Regulations, Title 23, Chapter 3, Subchapter 15 (Subchapter 15) and to submit a complete Report of Waste Discharge, including evidence of CEQA compliance. In the interim, it is appropriate for the Regional Board to prescribe requirements which establish a time schedule of tasks leading to compliance and to prevent water pollution from the continued discharge.
6. The Weed solid waste disposal site receives approximately 17.5 tons per day of nonhazardous municipal solid waste from commercial haulers and from the general public. The site also receives (10 percent) nonhazardous nonmunicipal solid waste consisting of dewatered sewage sludge, white goods, woodwaste and inert demolition debris. Liquids are not accepted at the site.
7. No stream or drainages traverse the site. Surface water runoff is diverted around the site and there are no flowing streams leaving the site. Rainfall and snowmelt in the area percolates into ground with no apparent runoff to surface waters. The area receives approximately 30 inches of precipitation including less than 12 inches of snow annually. Surface drainage from the landfill is tributary to Beaughton Creek, located approximately one-half mile southwest, thence the Shasta River.
8. The site is not located within a 100-year floodplain. Drainage structures are in place to divert stormwater runoff over and around the waste disposal area in order to minimize erosion of wastes and cover material.
9. The site is located on the flanks of Mt. Shasta, a dormant volcano which last erupted in 1786. Rapid geologic change would likely result in burial by future pyroclastic flows or ash. The site is therefore unlikely to be affected by geologic hazards associated with the volcano, and failure is unlikely.
10. The disposal site delineated in Attachment "A" and "B" meets the criteria contained in Subchapter 15 for classification as a Class III landfill for nonhazardous solid waste.
11. Land within 1,000 feet of the site is used for rural residential and industrial (lumbermill) purposes.
12. The beneficial uses of the areal groundwater include:
 - a. domestic water supply
 - b. agricultural water supply
13. Beneficial uses of the Shasta River and its tributaries include:
 - a. municipal and domestic supply
 - b. agricultural supply
 - c. groundwater recharge
 - d. water contact recreation
 - e. non-contact water recreation
 - f. warm freshwater habitat

- g. cold freshwater habitat
- h. wildlife habitat
- i. fish migration
- j. fish spawning

14. The Regional Board adopted the Water Quality Control Plan for the Klamath River Basin (1A) and North Coastal Basin (1B) on March 20, 1975. The Klamath River Basin Plan (1A) was combined with the North Coastal Basin Plan (1B) to form the Water Quality Control Plan for the North Coast Region. The Plan for the North Coast Region was adopted by the Board on April 28, 1988 and approved by the State Water Resources Control Board on November 15, 1988. The Plan references Subchapter 15, Chapter 3, Title 23, California Code of Regulations which was revised and updated on December 8, 1984. Subchapter 15 provides the regulations governing discharge of waste to land.
15. Adoption of Order No. 80-168, Waste Discharge Requirements for the site, was an action to regulate an existing facility which was in operation prior to adoption of CEQA. The Regional Board's action was exempt from any requirement for environmental impact assessment.
16. Prescription of waste discharge requirements is a regulatory activity which is exempt from CEQA pursuant to Section 15301 of Title 14, California Code of Regulations. The Regional Board finds that no adverse water quality impacts will result if the discharger complies with the terms of this Order.
17. The Regional Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with an opportunity for a public meeting and an opportunity to submit their written views and recommendations.
18. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.

THEREFORE, IT IS HEREBY ORDERED that pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder, Order No. 80-168 be rescinded and the discharger shall comply with the following:

A. DISCHARGE PROHIBITIONS

1. The discharge of hazardous wastes and designated wastes as defined in Sections 2521 and 2522 of Subchapter 15 is prohibited except as follows:
 - a. Leachate generated and collected at the site is defined as a designated waste and shall be managed at the site in conformance with Discharge Specifications contained in this Order.
 - b. Wastes containing greater than one percent friable asbestos are defined as hazardous wastes in Title 22 of the California Code of Regulations; however, because these wastes do not pose a threat to

groundwater quality, they may be discharged at this site if handled in conformance with section 25143.7 of the California Health and Safety Code.

2. The discharge of liquid wastes or solid wastes containing free liquids, except dewatered sewage or water treatment sludge as provided in Section 2523(c) of Subchapter 15, into solid waste disposal cells is prohibited. Liquid wastes and solid wastes containing free liquids may be discharged to separate ponding or spreading areas or under special circumstances only if the specific wastes, manner and place of disposal are approved by the Executive Officer. Liquids used during disposal operations shall be limited to a minimal amount reasonably necessary for dust control, compaction and fire control purposes. Leachate disposal applications shall be in conformance with Discharge Specifications contained in this Order.
3. The discharge of waste outside of the disposal area boundary shown on Attachment "B" is prohibited.
4. The discharge of wastes, including leachate, to surface waters, surface water drainage systems or groundwater is prohibited.
5. The discharge of wastes within five feet of the highest anticipated elevation of the groundwater surface is prohibited.
6. The discharge of wastes into ponded water is prohibited.
7. Ponding of liquids, including rainfall runoff and leachate, over solid waste disposal cells is prohibited.
8. Leachate discharges to land which is not controlled by the discharger are prohibited.
9. The treatment, storage, or disposal of waste, including leachate, shall not cause a pollution or nuisance as defined in Section 13050 of the California Water Code.

B. DISCHARGE SPECIFICATIONS

1. Leachate collection and removal systems shall be operated so as to minimize the buildup of leachate in the landfill and ensure that wastes in the landfill are not saturated. Automatic pumping systems shall be installed in each leachate collection gallery in order to provide for timely removal of leachate.
2. Leachate removed from the landfill shall be discharged into above-ground, structurally-sound storage tanks. Storage tanks shall have a berm or other revetment of adequate size and integrity to contain the largest potential accidental discharge of leachate.

3. Leachate removed from the landfill shall not be discharged into the landfill or below ground surface. Leachate may be spray-irrigated on inactive disposal cells or for dust control on roads during summer months. Spray irrigation shall be in a manner that will promote evaporation and will not result in saturated soil conditions, ponding or surface runoff. Leachate spray irrigation systems and disposal areas shall be approved by the Executive Officer. Leachate shall be discharged off site during winter months in a manner approved by the Executive Officer.
4. Wastes discharged at this site shall be provided with interim cover material. Only the active face of the disposal cell shall be left exposed to rainfall. The active face shall not be excessively large for daily waste placement. All inactive areas shall be capped with at least one foot of clean, earthen material compacted and graded to drain away from the active area. Inactive area shall be defined as a disposal cell that will not be receiving wastes within the next 48 hour period.
5. Surface drainage from tributary areas and internal site drainage from surface or subsurface sources shall not contact or percolate through wastes discharged at this site. Drainage ditches shall be located, to the maximum extent practicable, such that they do not cross over landfill areas. Site drainage over landfill areas shall be contained in man-made drainage conveyance structures such as corrugated metal pipe or in drainage ditches which are lined with at least one foot of compacted soil having an in-place permeability of 1×10^{-6} cm/sec or less.
6. Annually, prior to October 1, any necessary erosion control measures shall be implemented and any necessary construction, maintenance or repairs of drainage control facilities shall be completed to prevent erosion or flooding of the site.
7. Waste disposal cells shall be designed and constructed to progress in an orderly and timely manner toward final landfill contours. Final contours of the landfill shall be constructed as shown in technical reports contained in the Report of Waste Discharge.
8. After Regional Board approval of the site closure and post-closure maintenance plan, waste disposal areas reaching final grade shall be provided with final cover within two years of cell completion. Final cover shall conform to criteria as specified in Construction Specifications contained in this Order. Timing of final cover application may be delayed with written approval of the Executive Officer if the rate of cell settlement is of such magnitude as to require excessive final cover maintenance. The discharger shall install a sufficient number of permanent surveyed monuments on and near the landfill from which the elevation of disposal cells can be determined. Such monuments shall be installed by a licensed land surveyor or registered civil engineer.

9. All wastes that are windblown, carried in surface runoff or otherwise removed from the active area shall be collected regularly and discharged back into the active area.

C. CONSTRUCTION SPECIFICATIONS

1. Precipitation and drainage control systems shall be designed and constructed to protect the disposal area from any washout, erosion of wastes or cover material, and from inundation which could occur from surface runoff under 100-year, 24-hour precipitation conditions.
2. All containment structures and erosion and drainage control systems shall be designed and constructed under the direct supervision of a registered civil engineer or a certified engineering geologist and shall be certified by the individual as meeting the prescriptive standards and performance goals of Subchapter 15.
3. Materials used to construct liners shall have appropriate physical and chemical properties to ensure containment of wastes over the operating life, closure and post-closure maintenance period of the landfill.
4. Clay liners and clay caps (used in final covers) shall be sloped to promote rapid lateral drainage and shall have a minimum thickness of one foot, a maximum permeability of 1×10^{-6} cm/sec and a minimum relative compaction of 90 percent. In-place permeabilities of liners and caps shall be determined in the field using techniques approved by the Executive Officer. Construction methods and quality assurance procedures shall be sufficient to ensure that all parts of the liners and caps meet the permeability and compaction requirements.
5. Leachate collection and removal systems installed directly over clay liners shall be designed and operated to prevent the accumulation of one foot or more of hydraulic head on the liner at any time. Leachate collection sumps shall be designed and operated to keep leachate levels at the minimum needed to ensure efficient pump operation.
6. Materials used to construct leachate collection and removal systems shall have appropriate physical and chemical properties to ensure the required transmission of leachate through the systems over the operating life, closure and post-closure maintenance period of the landfill. Materials shall have sufficient strength and thickness to prevent collapse under the pressure exerted by overlying wastes, waste cover materials and equipment used on the landfill.
7. Landfill gas venting and removal systems shall be designed such that they do not allow leachate to flow out of a lined disposal cell through the cell liner.
8. Final cover material to be placed over the landfill shall be designed and constructed to function with minimum maintenance and shall consist, at a minimum, of a two-foot thick foundation layer, overlain by a one-foot thick clay cap, which is overlain by a one-foot vegetative

soil layer. The foundation and vegetative soil layers shall be comprised of clean on-site soils and shall be compact to a relative compaction of 90 percent. Clay caps shall be constructed as described in Construction Specification C.4 above.

9. Vegetation shall be established immediately upon final closure of a disposal cell. Vegetation shall be selected to require a minimum of irrigation and maintenance and shall have a rooting depth not in excess of the vegetative soil layer thickness.
10. Installation of the final cover shall be under the direct supervision of a registered civil engineer or a certified engineering geologist. Permeability testing and quality assurance procedures shall be conducted as described in Construction Specification C.4 above.

D. PROVISIONS

1. In order to comply with Discharge Specification B.7 (short-term operational and design plan), the discharger shall submit a report, by February 1, 1990 describing short-term disposal cell sequencing design and location and soil borrow locations for disposal operations through winter of 1991 and 1992.
2. The discharger shall submit a revised Report of Waste Discharge by December 1, 1990 which includes:
 - a. A summary of the site hydrogeology, current site configuration and operational plan, and ultimate site design.
 - b. Detailed onsite soils investigation to determine soil suitability and its availability for cover material. This includes sufficient soil testing to determine representative permeabilities of: onsite soil, soil beneath the disposal area (active and inactive), and recompacted earth cover.
 - c. Evidence that the project described in the Report of Waste Discharge has been approved in conformance with requirements of the California Environmental Quality Act.
3. The discharger shall prepare a plan pursuant to Section 2523(b)(2) of Subchapter 15, for periodic load-checking to ensure that hazardous materials are not discharged to the site. The plan shall be submitted to the Regional Board by December 1, 1990.
4. The discharger shall submit to the Regional Board by June 30, 1993, a site closure and post-closure maintenance plan describing the methods and controls to be used to assure protection of the quality of surface and groundwaters of the area during final operations and during any proposed subsequent use of the land. The plan must include:

- a. An estimate of closure and post-closure maintenance costs.
- b. A proposal for a trust fund or equivalent financial arrangement to provide sufficient funding for closure and post-closure maintenance.
- c. The amount to be deposited in the trust fund or equivalent financial arrangement each year.

This plan shall be prepared by or under the supervision of a California registered civil engineer or certified engineering geologist, updated annually, and submitted to the Regional Board by the 15th day of January of each year. The method used to close each WMU at the facility and maintain protection of the quality of surface and groundwaters shall comply with waste discharge requirements established by the Regional Board and the most current version of the closure and post-closure maintenance plan which has been approved by the Regional Board. The final report shall be submitted at least 180 days prior to final closure of the facility.

5. The discharger shall notify the Regional Board of changes in information submitted under this subchapter, including any material change in the types, quantities, concentrations, or location (boundaries or contours) of wastes discharged; site operations and features; or proposed closure procedures, including changes in cost estimates. The discharger shall notify the Regional Board a reasonable time before the changes are made or become effective. No changes shall be made without Regional Board approval.
6. The discharger shall notify the Regional Board in writing of any proposed change of ownership or responsibility for construction, operation, closure or post-closure maintenance of the landfill. This notification shall be given prior to the effective date of the change and shall include a statement by the new discharger that construction, operation, closure, and post-closure maintenance will be in compliance with any existing waste discharge requirements and any revisions thereof. The Regional Board shall amend the existing waste discharge requirements to name the new discharger.
7. The Regional Board shall be notified immediately of any slope failure occurring in the landfill area. Any failure which threatens the integrity of containment features or the disposal site shall be corrected promptly after approval of the method and schedule by the Regional Board.
8. The discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the discharger to achieve compliance with the waste discharge requirements.

9. This Order is subject to Regional Board review and updating, as necessary, to comply with changing State or Federal laws, regulations, policies, or guidelines; changes in the Regional Board's Basin Plan; or changes in the discharge characteristics, in five year increments from the effective date of this Order.
10. After notice and opportunity for hearing, this Order may be terminated or modified for cause, including but not limited to:
 - a. Violation of any term or condition of this Order.
 - b. Obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts.
 - c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
11. The discharger shall permit the Regional Board:
 - a. Entry upon premises on which a waste discharge is located or in which any required records are kept.
 - b. Access to copy any records required to be kept under terms and conditions of this Order.
 - c. Inspection of monitoring equipment or records.
 - d. Sampling of any discharge.
12. The discharger shall remove and relocate any wastes discharged at this site in violation of this Order.
13. In the event the discharger is unable to comply with any of the conditions of this Order due to:
 - a. Breakdown of waste treatment equipment;
 - b. Accident caused by human error or negligence; or
 - c. Other causes, such as acts of nature;

the discharger shall notify the Executive Officer by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the noncompliance and shall indicate what steps were taken to correct the problem and the dates thereof, and what steps are being taken to prevent the problem from recurring.
14. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.
15. The discharger shall comply with all provisions of Subchapter 15 that are not specifically referred to in this Order.
16. The discharger shall comply with all notice and reporting requirements of the State Department of Water Resources with regard to the construction, alteration, destruction, or abandonment of all monitoring wells used for compliance with this Order or with Monitoring and

Reporting Program No. 89- 70 as required by Section 13750 through 13755 of the California Water Code.

17. The Regional Board considers the property owner to have a continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge or water applied to this property during subsequent use of the land for other purposes.
18. The discharger shall comply with Monitoring and Reporting Program No. 89-70, the General Monitoring and Reporting Provisions, and the Contingency Planning and Notification Requirements Order No. 74-151 and any modifications to these documents as specified by the Executive Officer. Such documents are attached to this Order and incorporated herein.

Certification

I, Benjamin D. Kor, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on May 24, 1989.

Benjamin D. Kor
Executive Officer

California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM NO. 89-70

FOR

CITY OF WEED SOLID WASTE DISPOSAL SITE
CLASS III WASTE MANAGEMENT UNIT

Siskiyou County

WASTE DISCHARGE MONITORING

Quarterly volumes or weights of municipal solid waste that is discharged at the site shall be reported to the Regional Board. Types, quantities and volumes of special wastes shall be reported to the Regional Board. Special waste is considered to be any waste not normally associated with municipal solid waste.

GROUNDWATER MONITORING

All existing and future monitoring wells shall be sampled as follows:

- a. Static water levels shall be recorded monthly. Top of casing elevation, depth to groundwater and water table elevation shall be reported in a tabular form. Gradient contours, plotted on scaled maps, shall be developed for each month's measurement. If well is dry, it shall be noted in the monthly record.
- b. On a quarterly frequency during January, April, July and October, a representative sample of the inflowing formation water shall be collected. Prior to sampling, the bore hole shall be properly purged. Purging protocol and field sampling logs including equilibrium measurements, pumping rate and other appurtenant information shall be submitted. Samples shall be analyzed for the following constituents:

Chemical Oxygen Demand	pH
Specific Conductivity	Hardness
Total Dissolved Solids	Nitrate
Chloride	Sulfate
Fluoride	Potassium
Bicarbonate Alkalinity	Calcium
Carbonate Alkalinity	Sodium
Hydroxide Alkalinity	Magnesium

- c. Annually during April, additional samples shall be collected for the following constituents:
 - Halogenated and aromatic volatile organics (EPA 601 and 602 Methodology)¹. Specify that all peaks must be reported.
 - Acetone
 - Heavy Metals by ICAP Analysis

¹ EPA Method 624 may be substituted for Methods 601 and 602.

LEACHATE MONITORING

Once per month, the discharger shall observe the fill area to determine if leachate seeps have developed. If leachate is observed, the flow shall be estimated, and representative grab samples of leachate shall be collected. If leachate is not observed, it shall be noted in the quarterly reports, which will be submitted to this office.

Representative grab samples of leachate shall be collected on a quarterly basis as specified in the Groundwater Monitoring section above. Leachate monitoring samples shall be analyzed for general mineral constituents listed in the Groundwater Monitoring section above. Annually, during April, samples shall be analyzed for organic and metal constituents listed in the Groundwater Monitoring section above, in addition to the general mineral constituents.

SAMPLING AND ANALYTICAL METHODS

Sample collection, preservation, storage and analysis shall be performed according to the most recent version of Standard Methods for the Analysis of Wastewater. Analysis shall be performed by a laboratory approved for these analyses by the State Department of Health Services.

MONITORING RECORDS

Monitoring records shall be maintained by the discharger and shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board. Such records shall show the following for each sample:

- a. Identity of sample and sample station number.
- b. Date and time of sampling and person collecting sample.
- c. Name of person or firm performing sample analysis.
- d. Results of analysis and detection limits for each analysis.

REPORTING

Quarterly monitoring reports shall be submitted by the 15th day of the month following the quarter. Monitoring reports shall contain information collected during the previous quarter. Monitoring reports shall contain any information from monitoring performed more frequently than required or at locations not required by this monitoring and reporting program.

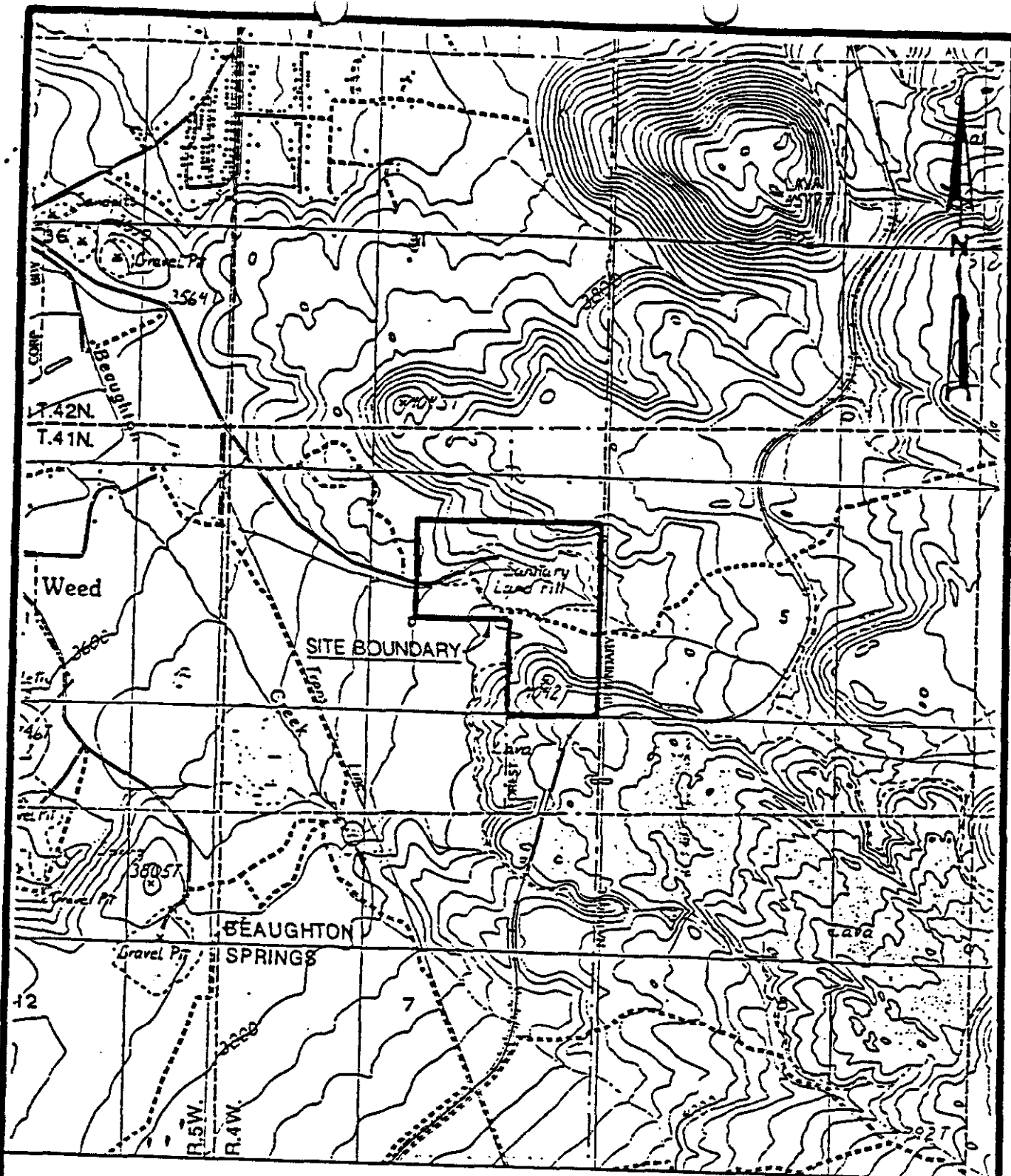
The monitoring data shall be arranged in the reports in tabular form so that the date, constituents, and concentrations are readily discernible. The monitoring and any necessary narrative reports shall be transmitted in accordance with specifications of Resolution No. 71-5, adopted by the Regional Board on February 3, 1971.

The discharger shall implement the above monitoring program on July 1, 1989.

Ordered by _____

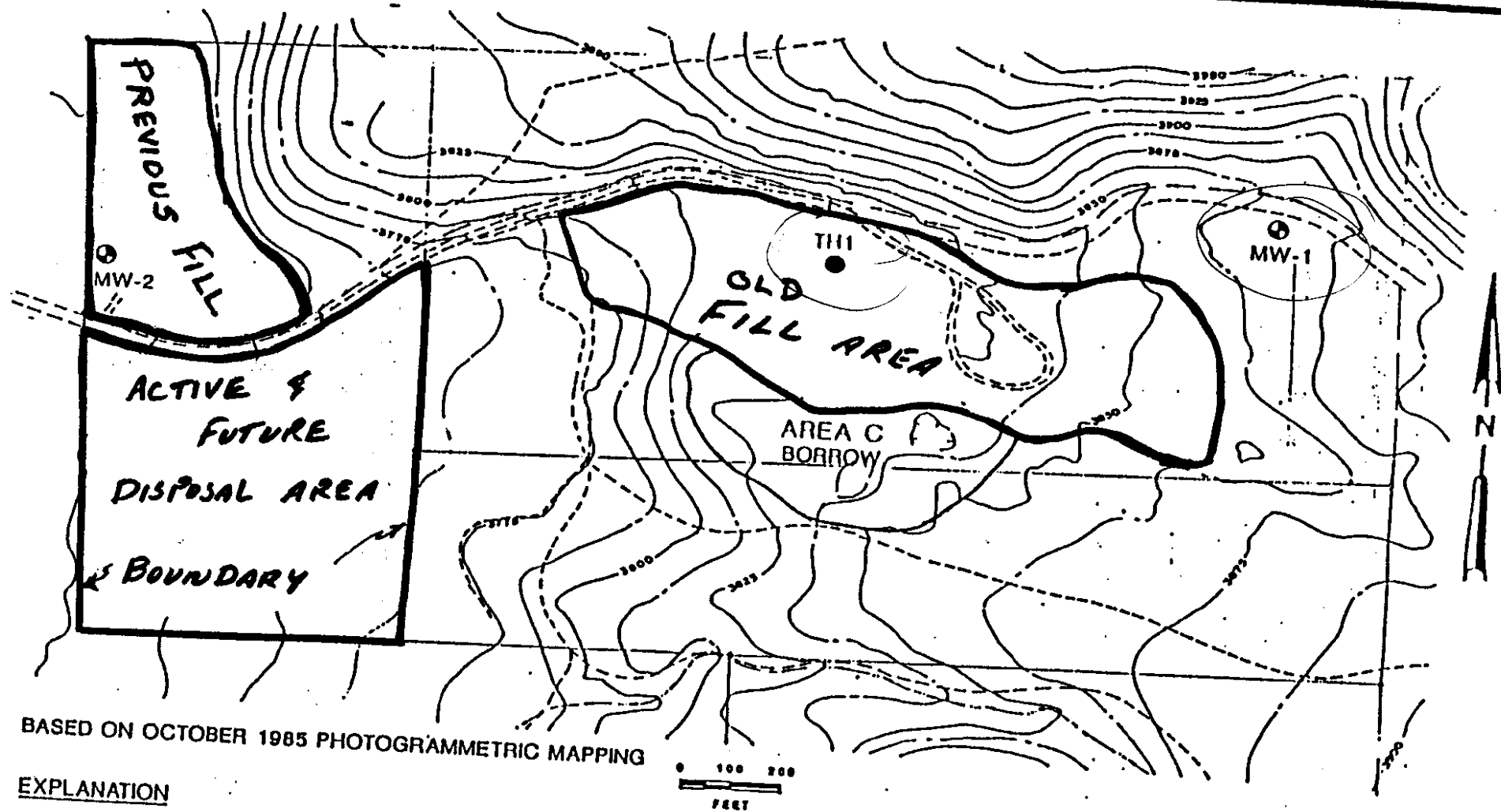
Benjamin D. Kor
Executive Officer

May 24, 1989



SCALE: 1" = 2000' CONTOUR = 40'
(from Hotlum, Calif. 7.5 Minute Quadrangle, U.S.G.S. Provisional Edition, 1986)

ATTACHMENT "A"



BASED ON OCTOBER 1985 PHOTOGRAMMETRIC MAPPING

EXPLANATION

- ⊕ Monitoring well
- Unsaturated zone exploratory borehole and sampling location.